

Claims

- [c1] 1. A symmetrical inductor comprising:
- a first metal layer, the first metal layer comprising a first conductive segment disposed on a first side of a line, and a second conductive segment disposed on a second side of the line, the second conductive segment and the first conductive segment being symmetrical to the line;
 - a second metal layer, the second metal layer comprising a third conductive segment disposed on the first side of the line, and a fourth conductive segment disposed on the second side of the line, the fourth conductive segment and the third conductive segment being symmetrical to the line;
 - a first contact plug for connecting the first conductive segment with a first end of the third conductive segment;
 - a second contact plug for connecting the first conductive segment with a second end of the third conductive segment;
 - a third contact plug for connecting the second conductive segment with a first end of the fourth conductive segment, the third contact plug and the first contact plug being symmetrical to the line; and

a fourth contact plug for connecting the second conductive segment with a second end of the fourth conductive segment, the fourth contact plug and the second contact plug being symmetrical to the line.

- [c2] 2. The symmetrical inductor of claim 1 wherein the first conductive segment and the second conductive segment form at least a circle pattern.
- [c3] 3. The symmetrical inductor of claim 2 wherein the line is a diameter of the circle pattern.
- [c4] 4. The symmetrical inductor of claim 1 further comprising at least a dielectric layer disposed between the first metal layer and the second metal layer, the first contact plug, the second contact plug, the third contact plug and the fourth contact plug penetrating through the dielectric layer.
- [c5] 5. The symmetrical inductor of claim 1 wherein a portion of the first conductive segment overlaps the third conductive segment of the second metal layer.
- [c6] 6. The symmetrical inductor of claim 1 wherein a portion of the second conductive segment overlaps the fourth conductive segment of the second metal layer.
- [c7] 7. The symmetrical inductor of claim 1 wherein the first

conductive segment comprises at least a rounded corner.

[c8] 8. The symmetrical inductor of claim 1 wherein the second conductive segment comprises at least a rounded corner.

[c9] 9. A symmetrical inductor comprising:
a first metal layer, the first metal layer comprising a first conductive segment disposed on a first side of a line, and a second conductive segment disposed on a second side of the line, the second conductive segment and the first conductive segment being symmetrical to the line, the first conductive segment comprising a first contact point, the second conductive segment comprising a second contact point, the first contact point and the second contact point being symmetrical to the line; and
a dielectric layer, the dielectric layer comprising at least a first contact plug and a second contact plug, the first contact plug being used to connect the first contact point to a second metal, and the second contact plug being used to connect the second contact point to the second metal.

[c10] 10. The symmetrical inductor of claim 9 wherein the first conductive segment and the second conductive segment form at least a circle pattern.

- [c11] 11. The symmetrical inductor of claim 10 wherein the line is a diameter of the circle pattern.
- [c12] 12. The symmetrical inductor of claim 9 wherein a portion of the first conductive segment overlaps the second metal layer.
- [c13] 13. The symmetrical inductor of claim 9 wherein a portion of the second conductive segment overlaps the second metal layer.
- [c14] 14. The symmetrical inductor of claim 9 wherein the first conductive segment comprises at least a rounded corner.
- [c15] 15. The symmetrical inductor of claim 9 wherein the second conductive segment comprises at least a rounded corner.